Det Bel Isle & Windsr Ferry Co 68

DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

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AROUND THE LAKES.

CLEVELAND.

The paddle wheels and guard beams are about compieted in fhe shops of the Cleveand Shipbuilding Co.

The new steamboat Northern King recently launched at the Globe Iron Works yard, will be ready for sea next week.

Among the new improvements at the Cleveland drydock, is an electric light which makes docking at night as easy as by day.

At a meeting of Cleveland Seaman's Assembly, sailors' wages were advanced as follows: Schooners $2,50 per day, barges $2,00.

Mr. H. D. Coffinberry yesterday closed a contract with the Cleveland Iron Mining Co. for the construction of two steel steamboats, a capacity to be 2,500 tons each.

Robert R. Rhodes and others will have built at the yard of Quayle's Sons, a new steamer, the dimensions of which will be about the same as the Samuel Mather and R. R. Rhodes.

It is expected that Shipbuilders Messrs. J. F. Pankhurst, Radcliffe, and Thos. and Geo. Quayle, who have been traveling in foreign lands for the past two months, will arrive home next week.

Messrs J. F. Eddy and Captain Sheers of Bay City, were in port yesterday looking after a berth for the construction of a new steel steamboat, but it is hardly possib'e for them to place their order in this city, the yards here being occupied by previous contracts.

Mr. Westaway of Detroit, engineer of the Michigan Central line, arrived in the city yesterday, and expressed himself as well pleased with the speedy manner in which the new ferry steamer is being pushed along, this splendid steamboat will be launched about the first of November.

Captain W. C. Guyles who has been in Milan Ohio., consulting with J. C. Lockwood relative to the construction of a new steel steamer, has returned to the city, and after canvassing the yards around the lakes, finds that the woods are full of orders and builders cannot take the order.

The Globe Iron Works Co. have closed a contract with Captain Henry, manager of the Lehigh Line of Buffalo, for the construction of a steel steamboat to be an exact duplicate of the E. P. Wilbur, which has proved herself to be a large carrier, a speedy boat, and perfectly satisfactory in every respect.

The tug Charles Henry took Mayor Babcock, Engineer Rice, Harbormaster Lynch and H. D. Goulder of the vessel owners' association, up the river bed Monday afternoon. They took soundings to ascertain how much dredging should be done, and discussed the opening of the river bed into the breakwater.

Mr. G. C. Barnes has received orders for the Chase fog whistle machine, for which company he is general manager and agent, to place the whistle on all the boats being built at the Globe Iron Works Co., for the northern line, Mr. Barnes has also placed the Aetna shaking grate on all the boats constructed at the yard of the Globe Iron Works Co.

At the Cleveland drydock since our last report business has been slack, none of the unfortunates having reached this port. The tug Gregory was in dock to have a leak around her stern pipe stopped, and some patches on her wheel. The tug Dudly had new stern pipe, and a leak stopped. The barge Transport part new stern, and the Ash for necessary repairs.

It is said that the fire boat J. H. Weatherly at the conflagration at the big mill, on the river last week, done more service in extinguishing the fire, than all the land steamers combined. Facts speak louder than words, and the record of this enterprise goes to prove the inestimable benefit conferred upon the city, when this vessel was placed in commission.

We are sorry to learn that Captain Goodwin of the life saving station, has been summoned to Sanford, a small town near Portland Me. The captain will have the melancholy experience of placing his brother David's remains to rest, and it was only last March that he buried his mother, at an advanced age. We extend our sympathy to Captain Goodwin and his family in their deep trouble.

Messrs. C. H. Presley & Co. of South Water Street, have been receiving quite a large number of orders for the Penberthy Automatic injectors, from outside ports, and a rather brisk business has been done here, amongst other orders they have supplied the Cleveland Drydock Co., the vessel tug Alice May, the barge Robert Greenhalgh jr. and other vessels, these injectors are giving good satisfaction, and Messrs. Presley & Co. have sold a large number of them, parties who have been supplied express themselves as being well pleased with the injectors.

Messrs. James Millen, B. L. Pennington, and James Cary Evens met and drew up a plan which will probably result in the vessel owners of the lake having a voice in the classification of hulls hereafter. The plan recommends that the vessel owners be entitled to equal representation in the classification board, the vessel owner to pay half of the expense of the classification work. The expense of issuing the Inland Lloyd's Register will also be mutual. The action of this committee will be submitted to the next regular meeting of the Lake Carriers' Association.

A well attended meeting of the Vessel Owners' Association was held Friday afternoon to consider the regulations which will govern the management of the St. Clair Flats Canal under the proposed law, giving the secretary of war full control over that waterway. General Poe has asked for advice from the vessel owners before sending suggestions to Washington regarding the management of the canal. Mr. James Millen, of Detroit, joined the local vessel owners in the discussion. A resolution was passed recommending an order to compel boats to check down in navigating the canal. Nothing was said of a limit in the depth of water to be allowed to large carriers, as it was agreed that such a rule could not be permanent, although it is expected that steps will be taken to prevent over loading. The resolutions also recommend that no sail shall be used in the canal.

PORT HURON.

Special to the Marine Record.

The schooner J. H. Magruder is at Dunford & Alverson's drydock repairing damages received in a collision with an unknown propeller on Lake Huron.

The barge Leader is in Dunford & Alverson's drydock receiving repairs.

The Canadian tug Ontario with the dredge Arnoldi is working on the bar near the light house.

The propeller Scranton went hard aground at Russel's Island last night. Tugs are working on her.

The disabled propeller Gilchrist passed here at 1:10 Monday afternoon in tow of the propeller Oregon.

The steambarge Rosedale went aground at middle ground opposite St. Clair, but was soon released and went on her way.

The steamer Sitka had her air pump connections broken out on Lake Huron on her way down. She will be taken to Cleveland for repairs.

The Garret Smith arrived here some time ago water-logged. She unloaded and went in dock for repairs. While lying at the dock some boat ran into her and she had to take off about 150,000 feet of lumber and go to the shipyard again. She is now ready to proceed to Buffalo with her cargo.

As Kendall, the marine reporter, was out alongside of one of the Canadian barges in tow of the tug James Walker, some miserable dog on her cut the line to the small boat and let the boat go adrift. We have a place in Jackson for such curs. K.

CHICAGO.

Special to the Marine Record.

Last Thursday the steam schooner Pewaukee coming down the south branch of the river, light, managed to run her bowsprit through a plate glass window in the building occupied by Shay & Co. as a shoe store, instead of through the starboard draw of Madison street bridge, where she was making for. Had she been minus a bowsprit as well as a jibboom the damage to the window would not have occuired as she would have brought up against the dock without doing any damage.

The steambarge Enterprise, of St. Catherines, Captain R. Walton, with barges Albatross and A. Muir arrived with about 1,100,000 feet of lumber from Spanish River, Georgian Bay, Friday morning, adding $2 per one thousand feet to Uncle Sam's big surplus. The fleet are owned by Muir Brothers, Port Dalhousie. The Enterprise will be rid of her center arch and receive new steel arches below decks next winter at her owner's shipyard at Port Dalhousie.

Davison & Holmes, vessel agents, sold the steambarge M. C. Neff for S. Neff, her owner, to S. K. Martin; consideration $26,000 cash.

S. K. Martin sold the steambarge Michael Groh to Cook & Campbell, Michigan City; consideration $11,500.

We are pleased to note that Captain W. G. Turner is again pulling the bells on the steambarge George Dunbar. Some five weeks ago a spark from one of the Muskegon mills injured the tissues of his right eye so badly that he was compelled to stay home under a doctor's care.

At the Chicago Drydock campany's the schooner Naiad was in dock to have a leak stopped, the schooner West Side for calking and general repairs and part new center board, the steamer Jay Gould for repairs to wheel and calking, the schooner Reed Case for bottom calking, the barge Wenona for calking, the schooner J. Kelderhouse and Two Fannies each received a new jibboom, the schooners T. L. Parker, Halsted and Adirondac received minor repairs.

In my journeyings around the river I went on board the Western Transit company's fine steamship, Boston, and entering her engine room I got into conversation with her veteran chif engineer, S. B. Muirhead, who brought her out in September 1880. He informed me that her engines were built by the Trout King Iron works, Buffalo, that they were steeple compound engines, two 40 inch cylinders, two 20 inch cylinders, and 42 inches stroke, and that they average 73 revolutions per minute, driving a Trout wheel 11½ feet diameter, 16 feet lead; her average time between Buffalo and Chicago being seventy-five hours, and the average amount of coal used is 165 tons for the round trip from Buffalo to Chicago and back, which is very light for a steamship carrying 2,550 tons. Engineer Muirhead says that her engines have never had to stop a minute for anything since they came out, that there has never been a brass belonging to the engines off the steamship for repairs, nor a machinist from any machine shop on her to do any work, that her slides and piston rods and valve stems are perfectly smooth, and he invites any one to go on board and inspect them. The above facts speak for themselves and redound greatly to the credit of the builders of her splendid engines and her able engineer and assistants.

I visited the splendid new steamship Harlem on her second trip to this port, not having caught sight of her on her first arrival. She is a beauty and Captain Frank Williams and Engineer Gregory are very proud of their respective ends of her. She is sister ship to the Hudson and has a very striking resemblance to her, but I found that the Detroit Drydock company, her builders, who always endeavor to make every ship they build better than the previous one, had made still more improvements in the Harlem; her officer's quarters being more capacious and convenient, also some additions to her machinery.

William H. Morrell, of New York, who is working in the interest of the proposed ship canal uniting lakes Michigan and Superior, was in the city yesterday on his way to New York. He said: "I have just returned from looking over both routes proposed, the Big Bay De Noque and the Little De Noque. I incline to think that the latter is best, and will so report. Our present plan is to run the canal from Escanaba and Gladstone to Mursing, on Lake Superior. There we can get an excellent harbor, sheltered by Grand Island. Marquette and Escanaba on either shore have subscribed equal amounts to put through new and accurate surveys. The line as now projected will be about thirty-six miles long and a lock of from eighteen to twenty feet will cover the rise. The country is favorable, as we can use the channel of the White Fish river about two-thirds of the way across, and at the divide there is a small lake which will serve as a reservoir and feeder for our lock. The surveys will be pushed at once, and the matter will be brought before congress at the next session. The canal will do away with the long and torturous journey through the straits and Soo. In the trip between Chicago and Duluth, 271 miles will be saved, or 542 on the round trip with all that implies in wages, insurance, etc."

The coroner held two inquests. One of them was on the body of John T. Stephens, a colored dock laborer, who fell down a hatchway into the hold of the steamer Wyoming while she was lying at the docks near Van Buren street Thursday night. He had been asleep, and, being called up to go to work, walked into the open hatchway before he was thoroughly awake. He is said to have a mother and two brothers somewhere in the south. A roll of money, amounting to about $125, was found on his person. Hans Waller, the mate of the schooner W. O. Goodman, was crushed to death at the foot of North Branch street Wednesday, while helping to launch a mast at Miller's ship yard. The verdict in both cases was accidental death.

At Miller Brothers drydock the schooner White Cloud is in dock getting a new apron, piece of new keel and new plank in her bilge; the propeller Saint Paul and schooner Barbarian to have leaks stopped; the schooner Mary Collins had her bottom calked; schooners John Mark and Rosabelle had leaks stopped; the tug O. B. Green is in dock for a new stern post and some repairs; steambarge J. D. Stimpson for a new shoe; schooner Windsor for repairs to damages done by steambarge Berrien colliding with her; schooner A. E. Vickery to have a leak stopped; the tugs Mary McLane, A. Miller, J. C. Ingram and Crawford were in dock for repairs. WILLIAMS.

FRANKFORT

Special to the Marine Record.

The secretary of treasury, acting on a petition of the citizens of Frankfort, has re-established the custom house at port of Frankfort, and appointed Emmet D. Wiltse as custom officer.

The U. S. lighthouse supply steamer Dahlia was sheltered in our harbor several days the past week, she is engaged in supplying all lights with coal. Frankfort pier head light received 1½ tons.

The steamer Petosky was in port Saturday with her colors at half mast, in respect to her captain Fred Seymour, who died at Manistee, the 20th, of typhoid fever.

The ill-fated steamer Vernon's life boat is here in Frankfort, it was picked up a few days after the disaster by the tug Maggie Lutz in Lake Michigan, she was capsized and some plank smashed in, a blanket was fastened to her, and her oars lashed, if the boat could speak what a tale it could unfold. The Maggie Lutz of Two Rivers is engaged in fishing here at present, they report that their nets fouled with the wreck of the Vernon, and they brought up a tin pail etc with the steamers name on it, she lies in 30 fathoms, 7 miles north of Two Rivers and six miles out. BURMEISTER.

BUFFALO.

The Buffalo Express says, an item has now gone the entire rounds to the effect that there is a new shoal near Buffalo harbor, and it is in order to make a remark. There is never any use in chasing such fugitives while they are on the wing. To begin with there is no new shoal at the entrance of Buffalo harbor west, south, west of the breakwater light. It has always been there and has always been known as Rose's outer reef. It is two or three miles off the harbor entrance and has deep water on the Canadian side of it. No buoy markes it, probably because it is in Canadian waters and Canada is not spending any money in this vicinity. Deep vessels occasionally get on the reef, but none have done so this year. The David Dows was the last, and the Tacoma and the Avery have also brought up there. In low water deep-draft tugs sometimes strike the reef. If Canada would mark the spot our vesselmen would be pleased, but as it is they look out for their bearings when in that vicinity.

The canal-tug C. T. Dennis is on record at the custom-house as sold by William Logie to Micheal Herron of Bordertown, N. J. The price is not stated.

Captain Thomas Currie was sworn in master of the propeller Porter Chamberlain in place of F. J. Holland.

The captain of the propeller Eddy does not believe that the Fitzgerald can out-sail him in a fair race, and offers to stake $100 on his belief.

Mr. George L. McCurdy of Chicago, general agent of the Boston Marine Insurance Company, was in the city yesterday.

The propeller A. P. Wright looks rather badly since her collision at Chicago with the Colin Campbell. Her stern is badly shoved over to port, and temporary repairs will be made here. As the Campbell struck her when she was aground it is not very hard to say who will have to stand the damages.

While going up the river the propeller John Rugee took a sheer and struck the Periwinkle, moored opposite the foot of Main street, damaging the latter considerably forward. The tug Behn, lying inside the Periwinkle, had her cabin and smokestack carried away. Her rail and several stanchions were broken. The Rugee was going to fast to be checked.

BAY CITY.

A long, rakish craft having the appearance somewhat of a revenue cutter, with two spars and a sky-scraped smokestack, worked her way up from the mouth of the river last night, and made a landing at Young Bros.' wharf, Bay City. It was the tug Sea Gull, purchased by the Reid Towing Company of Bay City, at New York last winter, and brought to the lakes for the purpose of engaging in raft towing. She came into the river yesterday afternoon with a raft of 5,000,000 feet of logs, which she brought from St. Ignace, having started on her way down ten days ago. The Sea Gull is a monster craft of her class, and her like has never been seen on Saginaw river. She has great power and will make a splendid boat for raft towing after she has been housed in. She has capacity for carrying 600 tons of fuel. She turns a twelve-foot wheel, and draws sixteen feet of water. She will remain in port two weeks.

MILWAUKEE.

The new steamer building at Wolf & Davidson's yard at Milwaukee will be launched in about three weeks. She will be named the Tippecannoe in honor of General Harrison.

The side wheel steamer Milwaukee will probably be taken off the Milwaukee & Grand Haven run next year and put on the Detroit and Sault ste Marie route. She has barely paid expenses this season. Her place will be taken by two steamers of the F. & P. M. model.

KINGSTON.

The propeller Ocean will be able to leave here Tuesday evening, when the repairs to her machinery will have been completed. Captain Towers remained in the city while repairs were being made, and as he is one of the jolliest mariners afloat he made many friends who will be sorry to lose his company.

MARITIME LAW.

PERSONAL INJURY.—OPEN HATCH.—PASSENGER STEAMER.—DAMAGES.

U. S. District Court, Southern District of New York.

Libellant, a passenger on the steamship Furnessia, in passing along the between decks to his quarters, fell through a hatchway, and sustained injuries for which this suit was brought. The hatch was usually kept covered, but on this occasion was left open for provisions. The passage-way was dark, and no guard rails were around the hatch, though the habit of the passengers to cross the hatch was known to the officers of the ship. Libellant did not know that the hatch was liable to be open and had never been cautioned in regard to it. Held, that the ship was responsible for the libellant's injuries his damages being assessed at $1,600.

BROWN, J.

The libellant, a young man of 24 years of age, in September, 1885, took passage on the steamship Furnessia from Glasgow to New York. He was a member of his father's family, for whom through tickets were purchased from Hamburg to Nicollet, Minnesota, via Glasgow and New York. On the second day out he and his younger brother were separated from the rest of the family and assigned to the quarter of the unmarried men in the lower between decks. His berth was a little forward of the fore hatch on the starboard side. The hatch was about 15 feet long by 12 wide, and was usually covered with a box cover. The lower flight of the stairway opened towards the stern of the ship; and was about 12 or 15 feet forward of the hatch. The hatch was usually kept covered, and the passengers in going [illegible]s were in the habit of walking over it. When four or five days out, the libellant on coming down from the upper deck to go to his quarters for supper between 5 and 6 p. m., fell down the hatchway, which was at that time open, and fractured his leg a little above the ankle. He was treated on the ship, and after arrival for 77 days in the Long Island hospital. Sixteen months later he filed this libel to recover his damages.

The weight of evidence is that there was not sufficient light to apprise the libelant as he went down to go to his quarters that the hatch was open. Had the proof been clear that the hatches above were open, I should have had no doubt that there was sufficient light to enable a person using ordinary care to see that the hatch was open. But the preponderance of proof is to the contrary. The lamps were not lighted and there was no guard or protection around the opening, save [illegible] about 8 inches high over which when the hatch was covered the passengers were accustomed to pass. There was a passage way of about four feet in width on either side of the hatch. The hatch had probably been opened for the purpose of taking up provisions; but during the considerable interval that had elapsed before the libel was filed, the seamen had been discharged, and the ship was without means of proving just what had been done, or why the opening was left unprotected.

The habit of passengers to cross the hatch covers could not have been unknown to the officers of the ship; and in the narrow space available to the steerage passengers its use more or less for that purpose was almost inevitable. It was the clear duty of the ship to provide reasonable security against danger, when the hatch was temporarily open, by means of a rail or guards of some kind, and by sufficient light to enable the unusual danger to be perceived. The ship is therefore legally answerable for not having done so.

The question of concurrent negligence on the part of the libellant is one of some nicety. Had the proof shown that libellant knew that the hatch was liable to be open during the dog-watch in the afternoon when provisions were procured from the hold if wanted, it would be difficult to aquit him of negligence in attempting to cross the hatch in these hours, when it was so dark that he could not see whether the cover was on or off. It is not common prudence for a person to step upon a hatchway in the dark, when he knows the cover is liable to be off. The brother of the libellant had seen this cover off a day or two before. The libellant testifies that he had never seen it off, and did not know that the hatch was liable to be open; and that he, and the various other passengers in that part of the ship were accustomed to cross it frequently. No caution had ever been given to passengers in that respect, nor any prohibition against passing over the hatch; or, if given, there was no proof of it.

As affecting the amount of damages recoverable there is much diversity of view in the judgment of the medical experts who examined the libellant as to the permanent effect of his injuries and the extent of his disability.

The libellant was brought up as a farmer. Upon his discharge from the hospital he went to Nicollet upon a farm purchased there by his father and has worked upon it ever since. He testified that he continued to suffer considerable pain, and though able to do all kinds of ordinary farm work, he cannot do as much as before the injury, being obliged to rest oftener through weakness and pain occasioned by the fracture. He estimates his loss of working power and value at about one half. The respondent's expert estimated it at from one seventh to one tenth.

The libellant testified that with such land as he would be able to cultivate he could make at farming from $800 to $1,000 a year, if perfectly able-bodied. He has, however no property of his own and works only for his father as a farm hand. The wages of an able hand at Nicollet, he testified, are about $208 a year, besides board. In the case of Purseglove, The Juanita, 93 U. S. 337, City of Panama, v. Phelps, 101 U. S. 453, and of the Washington, 2 Ben. 2279 Wall 513, the injuries, the pain and the final disability were much more severe. In this case, the disability is but partial, and its actual degree not very satisfaciorily established. The limb is a little shorter, but that alone would not affect its use. The curvature below the knee is a little increased and the foot is a little uncurved. The libellant's general health is good. His expert, judging from the general pain in the knee, and a little irregularity in the joining of the fracture which formed a slight displacement in the axis of support, regarded the pain in the knee as likely to increase, rather than diminish. There is no evidence, however, to show any increase of pain during the past year; nor is there any circumstantial evidence to corroborate the libellant's testimony as to any considerable pain still suffered from the injury. On the whole, the case more nearly approaches that of the Grecian Monarch, 32 Fed. Rep. 635, though attended by some circumstances which would entitle the libellant here to a larger award. On the other hand, the libellant's delay in prosecuting his suit for sixteen months after his substantial recovery; the ship's loss of testimony in the meantime; the somewhat speculative character of the suit, to be inferred from the libel's being prosecuted in forma pauperis, notwithstanding the comfortable circumstances of the libellant's father cannot be wholly ignored. On the whole, I allow him $1,600 and costs.

STEEL SHIP-BUILDING ON THE LAKES.

Mr. F. B. Norton, of Burlington, Wis., whose name recently appeared in these columns in connection with a communication on the above subject, has written a very able and comprehensive letter in defense of American ships to the Milwaukee Sentinal, from which we make the following extracts:

The free-trade party is now surrendering the control of our trade on the Pacific ocean to the British flag just as the same party surrendered the control of our trade on the Atlantic ocean in 1858. It was then that the iron ship asserted its supremacy on the sea, but the building and running of iron ships on the ocean was not in our line just then. The ad valorem tariff of 1846 had been exacted for the express purpose of crippling the iron and other manufacturing industries of the north. The British government, always ready to seize an opportunity, gave Cunard the means to add to his fleet the Persia, his first iron steamship, and to drive the last American steamship from her ports. All was done then, as now, in the name of economy. At the close of that free-trade period we had not a single iron ship in our navy and none of any size in our merchant marine, and for lack of them we lost enough the first year of the war to have secured us the control of the best trade of the ocean for fifty years.

We now stand alone, among the leading nations, in neglecting and sacrificing our foreign commerce. France, although selling to Australia goods to the value of but little more than $1,000,000 per year, has seven large steamships running between Marseilles and Sydney, with an annual subsidy of $638,511 for the period of fifteen years. Germany, though selling Australia less than $2,000,000 per year, is giving two steamship lines, one to Australia and one to China, $952,000 per year for fifteen years. This is money enough to build in our American yards ten of the best 3,000 ton steel steamships in the world and to pay all the expenses of running them between San Francisco and Australia for eight years.

The cry for foreign ships is ostensibly to help our foreign commerce, but practically has a very different object.

In 1870 a poweful lobby besieged our congress, in the interest of Great Britain, to permit foreign ships to engage in our foreign trade under our flag. For this they had two hidden reasons: First, England expected to be engaged in the Franco-Prussian war and wanted to hide her merchant ships under our flag, not caring to have them swept from the ocean by privateers as she had destroyed our ships during the war of the rebellion. Then the fact that they were unwilling to give bonds that these free foreign ships should pay regular duties in case they engaged in our coasting trade proved, as every business man knew, that their ulterior purpose was to gain possession of our coasting trade. Our navigation laws have twice saved the nation in war and have kept alive the shipyards, both on the sea-board and our great lakes, which, for the past twenty-five years, have given us the strongest, best modeled, and all things considered, the cheapest iron and steel ships in the world. The revolution by which steel has superseded iron has given to steel making ores a higher and controlling value and hence it has come to pass that our fabulous deposits of steel ores on Lake Superior now control the steel industry of the world. Chicago has the honor of leading the world in the manufacture of Bessemer rails, and the United States makes 50 per cent. more Bessemer steel than Great Britain. Steel is king and the seat of his empire is on our great lakes. The best steel ship plate in the world is now made at the city of Cleveland, and the place to look for the strongest and best steel ships, is not the Clyde in Scotland, but the yards of Buffalo, Wyandotte and Cleveland. They are building the best steel steamships at $75 to $100 per ton, which is less than England charged a few years since for steamships of only one-third the strength. Nominally, prices are cheaper in England, but if we built as many ships as she does, they would be cheaper here. It will be with ships exactly as with locomotives. We have not imported one for the past fifty years. We build them of higher priced materials and pay twice as much for labor, and yet we have undersold the English in every market in the world for the past twenty years, besides making far more efficient engines.

We hear the most said about the first cost of ships, when in fact it is scarcely worthy of mention in comparison with the more important items of meeting overwhelming competition, of securing freight both ways and of seamen's wages. Even if he had the gift of a fleet of the best ships, no one man is rich enough to run them in competition with lines having the strongest nations of Europe as active partners. It is a question of running ships, not building them. The Pennsylvania Railroad company, a company that has kept its stocks out of Wall street and devoted itself to developing the interests of the great manufacturing state whose name it bears, is the only power that has yet dared to replace the American flag in the Liverpool trade. They started the American line, with four first-class iron steamships in 1873, and have been able to maintain them, although with little profit. In the one item of wages they have paid $50,000 per year more than corresponding British wages. They have maintained the honor of our flag with far more credit to themselves than to the government that has left them to fight this unequal battle alone.

We lack neither the best ships nor the best goods to fill them; all we lack is the sand and the sense to run them. We have no need to wait for "free raw materials." We have at home, in unlimited supply, the best steel ores, the best coal, the best forests, the best farms, the best clothing wool and the best cotton in the world, along with a thousand other materials, which have enabled our manufacturers to lead the world in the most useful industries. The non-manufacturing nations, whose trade is most desirable for us, give our goods the preference. We sell to China 80,000,000 yards of cotton cloth every year, simply because it is better than English cloth. Even "the heathen in his blindness" can see that cloth made of long and sound American staple is better than English cloth mixed with inferior cotton from India and loaded with starch and clay.

The same is true of all the South American states. They want our goods and are willing to share the expense of shipping them. The Argentine Republic has had a standing offer of $100,000 per year to aid any American company that would run ships direct from the United States, and finally, when weary of waiting upon us, has given the subsidy to a party in England.

South America now buys $50,000,000 of American products, even though she has to get many of them by way of England, and we might easily have made our sales five times as great. If the men who represent the new south, who want to open mines and build factories and develop her fabulous latent wealth, had controlled her policy since the war, the south alone would now be selling to South America goods to fully this amount, and they would be shipped in American instead of British ships.

To place our ships upon the high seas on an equality with those of other nations, is simply a matter of national economy and self-preservation. A merchant marine is simply the militia of the seas. Protection, by developing our industries on the land, has made us the richest of the nations, and it is now time that we followed the example of England and protect our interests on the sea.—*Iron Trade Review.*

THE DARK SECRET.

Captain William A. Andrews and his little vessel, the Dark Secret, arrived in New York harbor last week. The Dark Secret is in comparatively good condition, although its bottom has not seen water for many a day. Captain Andrews, it will be remembered, is one of those foolhardy mariners whose sole ambition seems to be to cross the Atlantic in as frail a craft as can be turned out by a boat builder. After much preparation and considerable advertising, he sailed from Point of Pines, near Boston, Monday, June 18th, 1888, for Europe, in the Dark Secret, as he christened his little boat. It is only 14 feet 9 inches long. He went alone, and did not have on board even a stray cat or a yellow dog for companionship. His larder was well stocked with jerked beef, salt pork, canned goods and hard tack. He also carries as much fresh water as his limited space would allow. Since his departure he has been hailed by several passing vessels, to whom he reported he was all right and sanguine of completing his voyage. Of late nothing had been heard of him, and by many it was thought the foolhardy mariner had found a watery grave. Such would in all probability had been his fate had it not been for Captain Bjonedss, of the Norwegian bark Nor. On August 19th Captain Bjonedss sighted something to windward during the forenoon, which, through his glass he supposed to be a portion of a shipwreck. On getting closer it was discovered that the object was the frail craft above mentioned. Captain Andrews had been sixty days on the water in it without tasting a warm meal, and was so weak and emaciated that he had to be assisted on board the Nor. Captain Andrews and his brother crossed the Atlantic in a little vessel called the Nautilus, in 1878. The voyage occupied forty-five days. The Captain says he will again make the effort to cross the ocean in the Dark Secret, and will start next spring.

ENGINES OF THE SS. CITY OF NEW YORK.

These engines consist of the two largest set of triple expansion engines afloat. They are of the usual inverted vertical type. The cylinders are 45in. and 47in. and 113in. and 5 feet stroke. The boiler pressure is 150 lbs. The screws are 22 feet in diameter, and 28 feet pitch. They revolve outboard, and there is no opening in the dead wood between them. If they work without slip they would make 218 revolutions to the mile, and at 80 revolutions, which may be taken as the standard speed, the ship would steam at 22 knots. The engines stand side by side with a longitudinal bulkhead between them. They are in every respect duplicates. A door is provided in the bulkhead opposite the intermediate cranks, and the starting platforms are opposite the doorway. The reversing gear is Brown's patent hydraulic. The engines are quite easily started, stopped, or reversed, by one engineer on each platform. The engines are wholly of steel and gunmetal, save the cylinders. The great A frames are splendid castings, each weighing 6 tons, that is, 12 tons for each cylinder. The valves are all pistons four being fitted to the low-pressure cylinder. The eccentric hoops are cast-steel, lined with white metal, as are all the bearings throughout. The valves are disposed in the "corners" so to speak, and the valve stems are united in pairs by crossheads. They work so smoothly and are so perfectly balanced that the valve gear, which is of the ordinary Stevenson link type, has really little to do. The surface condensers are horizontal cylinders lying rather high up in the wings. The air pumps are worked by levers in the usual way. There are no feed pumps on the main engine, the boilers being supplied by five vertical Worthington donkey pumps in each engine-room standing against the forward bulkhead. Two of these pumps will feed the boilers, but the others are for reserve, or for the countless pumping jobs wanted in a big ship. The engines actually employed at any time in feeding the boilers are controlled by an automatic arrangement, a float in the hot well rising or falling with the level of the water in the well, and opening or shutting the throttle valve, an arrangement which is, so far as we are aware, quite new in marine work, and found to answer admirably, the donkey remaining steadily at work instead of tearing away for a few minutes, emptying the hot well, and then having to stand until the well fills again. It would be difficult, if not impossible, to find more admirable examples of the highest type of mechanical engineering than is supplied by the splendid main engines. They have been constructed throughout from the designs of Mr. J. Parker. Mr. Parker has brought to bear on his task a life-long experience. He was for some years second engineer of the great paddle steamer Persia, with side-lever engines. Mr. Parker's familiarity with all the difficulties and trials which beset the sea going engineer, has stood him in good stead; and the engines of the City of New York will maintain the fame of Scotch engineers in the old and new world. Nothing finer can be imagined than the working of these gigantic engines, with a piston speed of 800 feet per minute, certainly the greatest velocity ever attained by pistons 3 feet 5 inches in diameter. During the whole run round Ireland, lasting nearly 46 hours, not a drop of water was needed on a bearing, nor was there the least symptom of heating.

An experiment is being carried out in the City of New York. Although she is much larger than the Umbria and Etruria, and is intended to be faster than either, she has less boiler power. The Etruria has 72 furnaces. The City of New York has only 54 disposed in nine double-ended boilers, and containing 1250 square feet of grate surface. The apparent deficiency is met first by the use of the triple-expansion engines, which should be 20 per cent more economical than the three-cylinder compound engines of the Etruria, and secondly by the use of forced draught. The nine boilers are placed in three stoke-holes. The boilers are fired fore and aft, and no direct communication between the boiler compartments exists. Access can be had to each only by ladders and hydraulic hoists. Instead of the usual forest of cowl ventilators, there are erected at each side of the upper deck six large rectangular structures of heavy plate iron fitted with shield lids, which can be raised or lowered by screw gear. When dropped down, a sufficient space exists for the entry of air. In fine weather they are raised to an inclined position, and deflect air down the trunks. These trunks reach down to the fire-rooms, and each is provided at the bottom with a fan about 5 feet 6 inches diameter driven by a seperate engine at about 500 revolutions per minute. These fans deliver one at each side of the ship into the six stoke holes, in which they can maintain a plenum of about ¾ inch water pressure. So far the result of the experiment is all that can be desired. During her trial trip the pressure of 150 pounds was maintained in the boilers. The engines made one 82 and the other 83 revolutions per minute, and a speed of over 20 knots was attained with about 18 500 horse-power. No precise data as to power or speed has, however, been officially given. There is every reason to believe that when the engine and fire-room hands have thoroughly settled down to their work, 20 000 horse power or a little more will be attained.—*London Engineer.*

A dispatch from Boston says: Yacht Designer Edward Burgess and his crack fishing vessel, the Carrie E. Phillips, must look to their laurels or they will lose their supremacy on the high seas. Naval Architect D. J. Lawler has designed a new fishing vessel which he says will walk away from the Phillips even in a drifting race. This boat has easy lines and a powerful form, good ends and an excellent middle body. She has nearly a plumb stem, though it has a little curve to it. The keel has also a little rocker and there is considerable drag to it. The sternpost has a little rake, and Lawler has made a departure from the heavy in-quarters and short stern usually seen in fishing vessels and has given the new boat a nice overhanging stern. She is sharp at the bow, but none too much so, and her run is very easy. She has good section lines and her after lines are good with easy backs to the curves. She was designed to beat the Phillips and, judged by her form, she ought to do it. In comparing her with the Phillips it can be seen that she is finer forward, is about as high headed, but except for the slight curve in the stern there is no other very great difference between them. The vessel will be Inchaued next week and it is expected that she will be ready for her trial trip early in October. Her dimensions are 107 feet over all, 94 feet load water line; extreme beam, 24: 10¾ feet; draught, 12: 4¾; overhang aft, 12 feet; displacement 216 tons.

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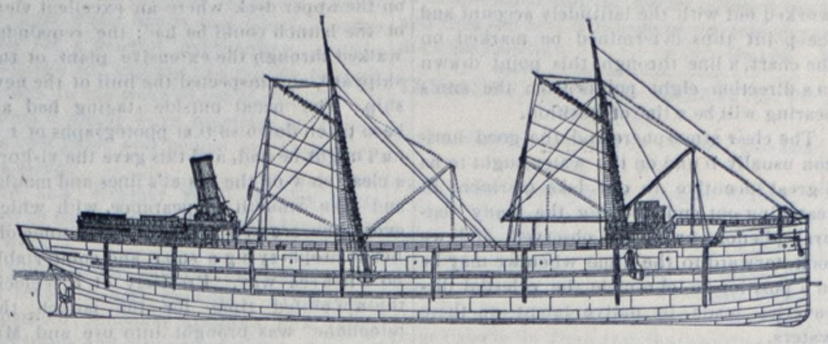

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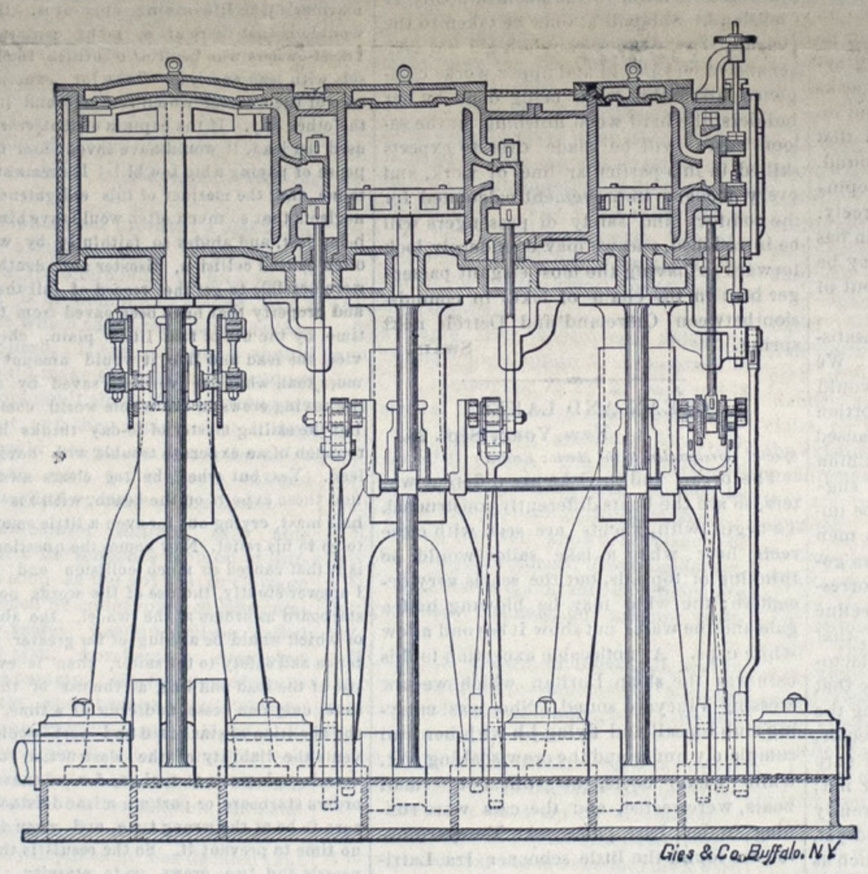
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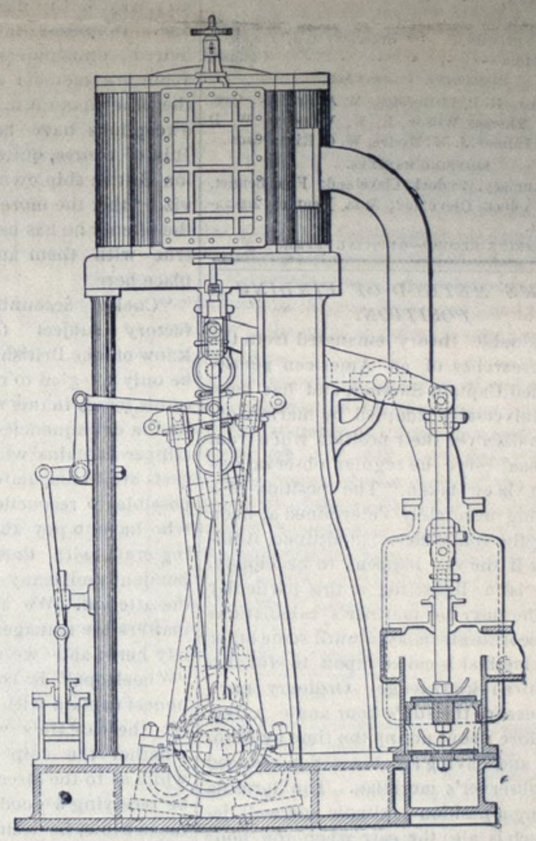

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MARINE RECORD—OFFICIAL PAPER.

SUMNER'S METHOD OF FINDING A POSITION.

This valuable theory emanated from the direct researches of an American gentleman named Captain Sumner, and has been almost universally adopted by marine observers to discover their position when from any unusual cause the regular observations have not been taken. The position of a vessel being accurately determined at noon by using the sun's meridian altitude, it follows that if the sky happens to be cloudy, or there is a light fog at this particular hour in the day, the mariner's calculations will be accordingly delayed until some other rule and method is called upon to furnish the required knowledge. Ordinary navigators measure the sun's hour angle a few hours before noon, noting the time by chronometer, and having an observation reduced to the observer's meridian. The formula for finding a position is simple and well defined; such is also the case when the hour angle is determined a few hours after noon, but both of these observations depend on the true altitude of the sun being found at noon, or when the sun arrives at its meridian altitude; hence, in former times the A. M. or P. M. sights were of no consequence unless the correct latitude could be determined on. This important part of the navigator's work has been rendered free to the marine world by the thought and attention expended on the subject by Captain Sumner. The result is based upon the facts that the sun is in the zenith of some one place on the earth's surface at every moment of time, and consequently the sun whenever observed cuts or divides a great circle, one-half of which will have the sun above the horizon and the other half below, and any small circles drawn parallel on the enlightened half will mark those places in which the sun has an equal altitude, and a line of position being found the vessel must be on that line. Should the line of bearing reach the land its direction gives the course by which the land can be made if desirable, otherwise a sounding taken proves the line of bearing to be correct.

In case the mariner wishes to make a certain part of the coast, it is only necessary to draw a line parallel to the line of bearing and steer for this line, then shape the course according to the direction of the line bearing, sounding regularly to check his position. In the event of having a clear night Sumner's method may be worked to advantage by observing two or more of the principal fixed stars, and lines of position drawn on a chart will give a near position of the vessel.

The problem always gives a correct latitude as the lines of position move parallel to themselves. If is also complete in itself as it not only gives the latitude and longitude, but also the true bearing of the body observed and thence the compass error, if any.

From this it follows that if an altitude be worked out with the latitudely account and the point thus determined be marked on the chart, a line through this point drawn in a direction eight points from the sun's bearing will be a line of position.

The clear atmosphere and the good horizon usually found on the water ought to be a great incentive to our lake mariners in searching out and studying the many natural phenomena to be observed, and we look forward to the time when we may be in a position to chronicle the celestial discoveries made by native talent on these waters.

PROFITABLE SHIP-OWNING.

Our correspondent "Wheelropes" in his letter of the 18th inst. in the RECORD of last week appears to have misunderstood the drift of our article on ship owning. We did not seek to dogmatize upon any of the details we had to introduce in dealing with the subject. To discuss these matters would not be profitable, therefore we were, and must be excused from doing so. We thought it was sufficiently clear that we were, in the first place, only dealing with British ship owning, not American, and then drawing the inference therefrom that our owners should always be guided more or less by a wholesome dread of over production.

If our correspondent wishes to look at the matter of profitable ship owning from an American point of view, we shall be glad at any time to throw our columns open to him and to others, only asking that, as far as possible, the main subject shall be kept in view and side issues avoided by each writer. The subject is an interesting one, and we shall be pleased to receive any contributions which may be of interest to our ship owning circles.

The integrity of ship masters is one of these side issues. It may be alluded to in any way, but to discuss it would benefit no one. Doubtless many of the old, gray-haired commanders "Wheelrope" speaks about are men far above suspicion, but on the other hand it must be remembered that exceptions have been occasionally found. It is, of course, quite possible that the opinion British ship owners express very freely, viz.: "that the more testimonials a man has the oftener he has been unshipped," may be true with them and yet be quite out of place here.

"Cooked accounts" are another unsatisfactory subject for consideration. We know of one British ship owner who would be only too glad to recover a small portion of his losses in this way, and that too caused by the delinquencies of one of these China clipper captains whom "Wheelropes" suggests are immaculate. But it would be impossible to reconcile the ideas of the men who have to pay the wagesbills of sea going craft, with those held by our correspondent and many others, and we decline the attempt. We all agree, however, that matters are managed much more satisfactorily here; and we are not quite sure that "Wheelropes" is correct in comparing the honest captain with the well paid director, for the captain's wages are always sure whether the ship pays dividends or not; while as to the director he may apparently be receiving a good remuneration and yet, meanwhile, be losing ten times as much as an individual shareholder. Some English shipping companies have been engaging cheap, incompetent, plausible men to act as managers, but in no case have they improved matters much. We would dispose of this part of the question, whether as regards captain or director, by saying that a good man is always worth a fair price, and an incompetent one dear at any price.

We merely allude to these minor matters by way of showing how much might be said on both sides, and no good result arrived at. Our object has been attained if we have succeeded in calling attention to the more important features of profitable ship owning.

The Chicago Herald says: Vessel owners are complaining about unfair treatment by the elevator managers at Owen Sound. The Lottie Wolf recently discharged a cargo of oats there and was short 441 bushels. A few days ago, when the schooner Pensaukee's cargo of corn was weighed out at the same elevator, it was 210 bushels short. Captain Dunham says he will not send his schooners there again, for, though he has tried to get some redress his efforts have failed.

LAUNCH OF THE CITY OF DETROIT.

WYANDOTTE, Sept. 26.

Special Correspondence to the Marine Record.

The launch of the new steamer City of Detroit, of the Detroit and Cleveland Steam Navigation company, took place at Wyandotte yesterday afternoon. The owners of this splendid new craft placed the well known steamer City of Cleveland at the disposal of their numerous friends, who availed themselves of this opportunity to the number of about five hundred, and although the weather was cloudy with light showers, there were fully two hundred ladies on board at 3:30 p. m., at which time the City of Cleveland pulled out from her berth at the company's wharf and steamed on to Wyandotte. On arriving there a large number of the company took up a position on the upper deck where an excellent view of the launch could be had; the remainder walked through the extensive plant of the shipyard, and inspected the hull of the new ship. The usual outside staging had all been taken down so that photographs of the hull might be had, and this gave the visitors a clear view of the vessel's lines and mould, and fine smooth appearance, with which every one seemed highly pleased, some old heads prophesying a smart and comfortable boat in a sea way. Precisely at 5 o'clock, the appointed time for the launch, the telephone was brought into use and Mr. Kirby gave the order to cut. At the word the vessel began to move, and as she glided gracefully off the stocks, her intended partner welcomed her virgin plunge with shrill whistles, and with a hurrah from the sightseers she steadied, and sat upon the water like a thing of life. It would be in order to say that great credit is due to her builders, etc., but as nothing succeeds like success, may they have their full share of it. The new boat is 297 feet in length, 40 feet beam, and including the guards 72 ft. and her depth of hold is 15 feet; her steel plates are 7/8 and 5/8 inches thick, and she has seven compartments, the bulkheads being made of 3/8 inch iron strongly braced with 5 by 3 angle iron. The engines were built by W. A. Fletcher & Co., of New York, and are a compound beam; her boilers are of the Scotch type constructed by the Lake Erie Boiler works at Buffalo, and have longitudinal seams, triple rivited with three furnaces 39 inches in diameter each, having 188 tubes 3¼ inches diameter, 8 feet long. She will be fitted with a Providence steam windlass and a steam steering gear; the side wheels have feathering paddles, and the latest improved pumps and life boats, lifebuoys and rafts are to be furnished, also electric lights and signals similar to the steamship City of Cleveland. She will at once be taken to the Detroit Drydock company's yard to have her machinery put in and upper works completed, all of this work being done by her builders; the hard wood finishing in the saloon cabin will be made over to experts skilled in this particular line of work, and every modern improvement calculated for the comfort and safety of passengers will be introduced, and we may confidently look forward to having the most elegant passenger boat on the chain of lakes in commission between Cleveland and Detroit next spring.

SWAIN.

OCEAN AND LAKES.

NEW YORK, Sept. 26.

Special correspondent to the Marine Record.

The ocean and the lake are different waters, so are the boats differently constructed. To begin with, yachts are seen with close reefs here when a lake sailor would be thinking of topsails, but the sea is very deceptive; the wind may be blowing half a gale and the water not show it beyond a few white caps. A noticeable exception to this case was the sloop Puritan which we saw crossing Vineyard sound. She was carrying club topsail and flying-jib with her rail completely under and the crew soaking wet, while whale boats, the stiffest of small boats, were reefed, and the cats were running under bare poles. At Vineyard haven we found the little schooner Ira Lafrinier. She is in the coasting trade out of Bangor, and is told as a lake vessel immediately even in her oceanized form which consists of staying her topmasts for'ad till they seem to be sprung, the jibstay leading only half way up the fore topmast, one topping lift heavily purred, and steering with a tiller and a wheel combined, the wheel moving with the tiller, a contrivance which seems to me very awkward, but they can't change her bottom very well so the natives know her from afar off as "that consairn'd kittle bottum." It looks quite funny to see what appears to be a little vessel, probably she is about a hundred and fifty feet long, as a full rigged ship; a heaving line can easily be thrown over her lower yards from deck, but the mystery is explained when you see her in the railway. She is a large vessel, in fact, but she is under water. The most interesting boats here are the old-fashioned whalers; any number of them may be found at New Bedford; most of them are barques but there are some snips and brigs. They look very short and chunky, which is not to be wondered at when everything aboard is modeled after a circle. Their hulls are painted black, white, or drab, with a band of port holes painted along the side, but most of them look yellow and green between the iron rust and the copper. The spars are painted pine white, also the heavy wooden davitts along the side, giving the boat a very ghastly look, especially at night. These old boats are fast disappearing for, although they are mostly about a hundred and fifty years old, they are fast being fitted out for the Pacific never to return, as they are kept there until they are lost, shipping their oil home by rail.

At New York there are a great variety of local craft, such as sloops with large raking spars, the spar being twice the length of the boat, floating elevators which look pretty top heavy, and little schooners that are all cutwater. Here are seen the largest steamers, ships from all parts of the globe, some from England, Germany, Austria and Africa. There is one here now from Greece; she is painted blue, trimmed all over with red, green, and "yeller." She is populated by about thirty of the most dirty, blood thirsty, looking objects that could be found, each one dressed in a red cap and a pair of ear rings, what else they had on could not be told. Occasionally a Chinese junk is seen here, but not often.

A word about the water and I am done. The water is a deep blue with purple shadows and light green lights. The horizon seems so much farther away than the lake horizon, and it is generally a dark purple, and a boat going through the water makes a buzzing noise that the lake mariner never hears. The foam is yellow instead of white, and it is coarser, reminding you of marbles which seem to pop. One thing I forgot to mention is the rig of the three mast coasters. Their spars are all about the same size, but the mizzen looks the largest and is quite well for'rd of the cabins which are not at all small, and the mizzen is the first sail set and the last taken in; the jibs come next and then the main, and last the foresail, which, if it is blowing, is not set. They also carry main and mizzen topmast staysails.

R. WILCOX.

LEAD, LOG AND LOOKOUT.

To the Editor of the Marine Record:

In an article recently published in the MARINE RECORD, I see is a point to call special attention to the use of the sailor's three "L's," the lead, log and lookout, the use of which proves to be the sailor's greatest safeguards, when even compass and chart is proven to be of no use to him. In darkness, fog or storm, and very often in clear daylight the use of the lead is necessary and can always be depended upon as being the mariner's true life saving apparatus. But the trouble is that there are so many captains and vessel-owners who neglect to furnish their vessels with lead and line. Take for example the case of the steamer which ran aground in a fog the other day. If the captain of that vessel had used the lead, it would have saved him the expense of paying a big tow bill. It seems strange to me, that the mariner of this enlightened age, neglects that so much often would save him from being lost, and abides so faithfully by what so often caused collision, disaster and death, if it were possible to get the record of all the lives and property that have been saved from time to time, by the use of that little plain, cheap device, the lead and line, it would amount to far more than what has ever been saved by all the life saving crews in the whole world combined, but the sailing master of to-day thinks himself to much of an expert to trouble with having the lead. Yes, but when the fog clears away, we find those experts on the beach, with his flag at half mast, crying out for even a little small boat to go to his relief. Now comes the question, what is it that caused so much collision and death? I answer stoutly, the use of the words port and starboard as orders at the wheel, the abolition of which would be a thing of far greater importance and safety to the sailor, than is even the use of the lead and line, as the use of the lead saves only one vessel and crew at a time, while the abolition of starboard and port would prevents the liability of the destruction of two vessels and crews at a time, for whenever the orders starboard or port are misunderstood, it is sure to be at the wrong time, and when there is no time to prevent it. So the result is that two vessels and two crews go to eternity. If we could give an account of all who lost their lives on account of the use of those orders, since the adoption of the wheel, I am sure that they would amount to far greater number than what fell at Gettysburg or Waterloo, or if it were possible that we could take the orders starboard and port and also the lead and log and put them into a glass case, they would form the best contrast of devil and angel that ever was exhibited. The lead and log may be compared to an angel of pure faithfulness, and always ready to guide our poor sailors off the danger sands and rocky shore, while the orders starboard and port given to the man at the wheel with such an contrary meaning, may be compared to a demon of darkness and treachery, and takes the first opportunity to replete out list of sailors.

There are a great many people in this world who profess to be the true friend of the sailor, and very often they go so far as to say that they can save our souls. Well, if they are what they pretend to be, we may ask one favor of them and that is to assist us in having the words starboard and port abolished, they may ask what words we want used instead of starboard and port, we may answer that anything in the world would be better, but we prefer right and left; for this reason, when the captain or officers gives the order starboard he means go to the left, and when the order port is given, it means go to the right, so you see plainly there is no use for the starboard nor for port. Please tell the captain and officers to say what they mean when giving an order to the man at the wheel, and that will put an end to the whole complication.

I will make so bold as to ask one more favor of the sailors friends, and that is to assist us in compelling the vessel owners to furnish their vessels with lead and line, and to pay the poor sailors enough wages to live on: and as for saving our souls we are perfectly willing to have that left to He who came to us in the boat.

PATRICK CAROLAN.

TO MUCH DRAFT.

The following letter from General O. M. Poe to B. L. Pennington, secretary of the Vessel Owners' Association, shows that, after all that has been said and all the resolutions passed, masters still persist in putting more tons into their boats than can get through the St. Clair Canal:—

DETROIT, Mich., September 22, 1888.

Mr. B. L. Pennington, Secretary Cleveland Vessel Owners' Association, Cleveland:—

Dear Sir: Notwithstanding the warning given, some vessels continue to load to greater draught than can be safely carried through St. Clair Flats Canal. The Susquehanna, a few days ago, and the David Dows yesterday are samples.

The latter was drawing full sixteen feet by her marks, and the result was an injury to one of the dredges at work in the canal, together with the subsequent groundings of the Dows, and a blockade of a couple of hours.

Other vessels have also disregarded the recent action taken by the organizations representing the marine interests.

If we are to avoid a recurrence of the recent blockade vessel men must pay more regard to the known conditions, especially in view of the fact that the water is falling, and will continue to do so.

Two dredges have been at work for two weeks and a third one is on the way to the canal. They are doing good work, but there is much ground to cover—more than two miles long by full 200 feet wide, and it takes time. Very respectfully,

O. M. POE,
Colonel of Engineers, Brevet Brig. Gen., U. S. A.

LAKE FREIGHTS.

A fair amount of business was done yesterday in the way of chartering vessels, though most of it in a quiet way with less discussion about rates than is frequently the case. The latter seems settled for the present at figures previously quoted.

Ore engagements were as follows: steamer Calumet and schooners Annie M. Ash and Montblanc, Escanaba to Ohio ports' $1. 40; steamer Kalkaska and consort Aranac, steamer Kate Butteroni and schooner Galatea, all Marquette to Ohio ports. $1 60,

Other coal charters were: schooner Columbian Huron to Milwaukee, 85c: schooner Grantham, Lorain to Walkerville, 30c; schooner F. A. Gaorger, Lorain to Gladstone, 60c; schooner J. E. Gilmore, Clevelaud to Escanaba, 60c; steamer Bessemer, Toledo to Gladstone, 65c: schooner. Harriet Ross, Cleveland to Port Huron, 40c.

BUFFALO, September 26.—Coal freights unchanged. Charters: Susan E. Peck, St. Louis, Potomac, Vought, Sawyer, Edwards, Golden Age, Marion W. Page, Chicago, 80c; J. P. Donaldson, Brightie Donaldson, Milwaukee, 75c: Anna Maria, St Ignace, 75c; White, Leighton, Hammond, Detroit, 25c; A. J. Rogers, Toledo, 25c; Fitzhugh, Escanaba, 75c; Wilbur, Gladstone, on owner's account.

Canal freights lower, wheat 4c, corn 3⅜c to New York.

CHICAGO, September 26.—Owing to the very unsettled state of the markets there was but a moderate business done in lake freights. Rates to Buffalo ruled easy on the basis of 3⅜c for wheat and 3½c for corn. Erie Canal rates were quoted at 5½ for wheat and 4½ for corn.

RELEASE OF THE OSCEOLA.

The Detroit Free Press gives the following account of the several attempts to release the Osceola: It says: The work of wrecking the propeller Osceola, which came off Port Austin reef a few days ago, was a great job. Captain Grummond worked at her until the fall storms drove him off, and last spring he renewed his efforts, but he was at last obliged to abandon the contract and was out his expenditures. The wrecked boat was sold in July to a syndicate composed of Henry McMoran, of Port Huron, and J. J. Rardon and Crosby & MacDonald, who went into a side speculation. Captain Rardon had charge of the expedition and has worked at it for several weeks. He first attempted to raise the boat by large pontoons, but they broke under the weight. Her bottom was then patched up and she was pumped out, but there was not enough water to float her off. This necessitated another delay while pontoons were being forwarded from Port Huron. When they arrived the Osceola was lifted off her rocky bed and is now in Port Huron, where she will be repaired. She is said to be in good shape with the exception of her bottom, which is badly knocked to pieces. Her engines are uninjured. She was valued at $75,000 when she went on the reef and was bought at a marshal's sale for $8,500. The wrecking expense has been heavy, and it is impossible to estimate the repair bill, but a good margin of profit is doubtless left the syndicate. This is the history of the most obstinate wrecking job on the great lakes. The syndicate will claim the marshal's bill of sale including everything on the Osceola when she struck the reef, and not what was left after she had been stripped, notwithstanding the stripping was done before the sale.

LAKE CARRIERS' ASSOCIATION

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

BOARD OF MANAGERS, 1888.

THOMAS MARTIN,	Oswego, N. Y.
JAMES ASH,	Buffalo, N. Y.
W. BULLARD,	Buffalo, N. Y.
S. D. CALDWELL, *President*	Buffalo, N. Y.
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AS. CAREY EVANS, *Treasurer*,	Buffalo, N. Y.

MARINE RECORD—OFFICIAL PAPER.

FORE AND AFT.

The first iron vessel in Lloyd's register was in 1837.

The Osceola, of Ward's Line, which has been on a reef since last fall was pulled off this week.

It is said that the steamship Spokane lost her wheel in Saginaw Bay and was towed to Sand Beach by a tug.

The Canadian government will begin at once to dredge out the middle ground at Port Huron to eighteen feet.

The Baltic was released from Clapperton Island Saturday night and taken to the Owen Sound drydock for repairs.

Marine men say the wind in August blew at times harder this year than in the same month in any previous year.

The Canadian steambarge Kincardine, lumber laden, is sunk at French River, Georgian bay. Insured for $4,000.

The captain and first mate of the British bark Gylfe have been arrested on a charge of having attempted to scuttle their vessel.

The steamer Rosedale went on the middle ground abreast of St. Clair during the night and was released about the same time.

The Scranton got aground on the head of Russel Island Sunday night, but was released at 11 o'clock the following morning.

The big propeller Helena will take no more wheat cargoes to Buffalo for the present. She has gone into the Escanaba ore trade.

The Owego again broke the record on her trip up, making the run from the Straits to Chicago in twenty hours and fifty-eight minutes.

Lumber shipments by water from Saginaw river for the week ending 21st.: Lumber, 17,562,000; shingles, 3,410,000; staves, 690,000.

Fruit men in Wilson, N. J., are trying to engage a propeller at Buffalo to take 10,000 barrels of apples from Niagara river to Liverpool next month.

The sidewheel steamer Greyhound, formerly the Northwest, which has been running this summer on the line between Detroit and Toledo, has made her last trip for this season.

Cleveland ship builders are all probably on high seas. Mr. Pankhurst sailed on Wednesday, and Messrs. Radcliff, the Quayle brothers, and others left Liverpool Friday in the Servia.

In 1797 57.600 tons of shipping were built in the United States, in 1811 147,000 tons were launched, and in 1812 the first steamship that was constructed on American waters was launched.

In the house last week the committee on rivers and harbors reportod the bill authorizing the secretary of war to prescribe rules for the care and management of the St. Clair Flats ship canal and it was passed.

Captain Garrett, of the steamer Ella Ross, says the reason he made no money on the Kingston, Montreal & Ottawa route was that tourist travel was affected by cool weather and the presidential campaign.

The Canadian department of marine and fisheries has issued a notice warning mariners of the existence of a dangerous rock at the mouth of French river, Georgian Bay, half a mile from Bustard light house.

The secretary of the treasury has informed the secretary of state that Grand Rapids, Mich., and Duluth, Minn., have been constituted ports of entry to which merchandise can be consigned under the immediate transportation act.

One hundred million of stars exist in the firmament and the international astronomers assembled at the Paris observatory in 1887 are taking steps to prepare a map of the heavens, which will be composed of 1,800 to 2,000 sheets.

Captain J. Allen has placed several buoys in Kingston harbor marking definitely the various shoals. The steamer Alexandria carried one of them away. It is proposed to make the owners of boats that carry away buoys to pay for the damage done.

The body of John Henderson, captain of the ill-fated schooner Blanche, which went down with all hands on the 28th of May, was picked up on Plew's Point by Mr. Lyons, a mile and a half from the residence of the deceased, at Lockport, near Colborne.

Patrick Kelley, the seaman who stabbed two of his shipmates, John Chapman and John Parry, on the National line steamer Erin while bound from London to New York, and who was brought back to London, was tried and convicted. He was sentenced te be hanged.

With a view to enforcing the rules governing tugs, the towing companies of Chicago have entered into an agreement that all complaints of violation be referred to the superintendents of the companies, who shall have power, on a two-thirds vote, to punish any violation by any captain by suspension without pay for from five to fifteen days.

The Chicago board of marine underwriters fixed the trip rates on grain from September 15 to October 1 as follows: To ports on Lake Michigan, 40 cents; on Lake Superior, 70 cents; on Lake Huron, Sarnia, and on Detroit river, 50 cents; on Georgian bay and Lake Erie, 60 cents; on Lake Ontario and Ogdensburg, 75 cents; Montreal, $1 10. The rates on A2½ vessels 50 per cent. additional, and on B1 100 per cent.

There is no truth in the report circulated a few days ago that the steamer Ida had been seized at Kingston and her owner made pay a fine of $400 for sailing without properly qualified officers. Enquiries were made about the matter, but Mr. Arnold says he was able to satisfy the authorities and in return was treated by them in a most courteous manner.

There will, no doubt, be many matters brought to the attention of the International Marine conference, by those interested in securing safe navigation. It is to be hoped that many of them will point out the necessity of laws to prevent color blind persons from being employed in any capacity on ship board. Every body employed on board a vessel should have as near perfect sight and hearing as possible.—*New York Maritime Register.*

The Michigan, a peculiar looking craft, lay moored near the foot of Jay street yesterday morning. She is a three-masted schooner, and uses steam as well; is built upon a new model, and is new throughout. Her boilers are of one-inch steel, and her engines of the new triple-compound pattern. She was built at Shamokaway for the owners, Montgomery and Coldwell of this city. Her length is 178 feet, and she steams seventeen knots on five tons of coal in twenty-four hours.—*From the Portland Oregonian*

Captain Fred Seymour, master and part owner of the passenger steamer Petosky, died at Manistee, Michigan; Friday. Captain Seymour went ashore a month ago suffering from an attack of typhoid fever. He had nearly recovered when a relapse set in last week. He was well known and much respected by vesselmen all over the lakes. He was regarded as one of the best pilots in Lake Michigan waters. He left the service of the Northern Michigan Line last spring to etsablish a rival business in connection with his brothers.

A Philadelphian has invented a patent appliance for a hawser which is intended to prevent a rat from climbing up on a vessel. The patent is an appliance shaped like a funnel, over which the varmints can neither crawl nor climb. If this invention should work, it would make the patentee a fortune; but old sailors don't think that anything can keep rats out, and they declare that if they (the rats) could not get on board the ships any other way, they would swim out and crawl up the slippery sides of the boats.

Louis Abrahamson shipped as a able seaman board the schooner Ironton at Buffalo, and as soon as the voyage to Chicago was commenced he endeavored to take command of the vessel. Captain Wilson called the sailor to task. Abrahamson attempted to thrash the captain. He was locked up in the forecastle and brought to Chicago. Captain Wilson wanted Justice Kersten to fine Abrhamson for disorderly conduct, but the court decided that the offense was not committed within his jurisdiction, and the sailor was discharged.

The treasury department has decided that where an American vessel en route to a foreign port springs a leak and sinks in American waters and it becomes necessary to bring pumps from a foreign port for the purpose of raising her, domestic pumps not being obtainable, the duty assessed on such pumps may be refunded under the provisions of section 3,115 of the revised statutes, which authorizes the refunding of duty on repairs necessitated by stress of weather while in the regular course of her voyage to secure the safety of the vessel to enable her to reach her port of destination.

Meteorological summary for the week ending September 25, 1888:

Mean actual barometer	30.13
Mean temperature,	59.2
Mean humidity	76.9
Total precipitation	.03
Prevailing direction of wind	S. E.
Total wind movement	745
Av. cloudiness	3.4
Av. state of weather	Clear.
Max. temperature, highest	72.4
Min temperature, lowest	48.0

W. H. HAMMON, Sergt. Sig. Corps, U. S. A.

Breck & Booth have chartered the schrs. Blake and St. Louis to take iron ore to Cleveland.

Around the Lakes Continued from 1st Page.

DETROIT.

Special to the Marine Record.

Detroit Drydock Boiler works are building a new boiler for Mr. Louis Lemon's tug Quick-step. The tug being busily engaged at the Belle Isle bridge, the boiler will not be placed in her until she lays up in the fall.

The Detroit Boat works have secured a location near the Belle Isle bridge and they will erect a large and commodious plant for building yachts and boats. The improvement has been needed owing to the brisk business done by this firm.

Since your last publication the Detroit Drydock company have had in their dock the Specular for calking, repairing rudder and new stern bands, the Chief Justice Waite for a general overhauling, and the Newburgh for calking and repairs to stern bearings in the wake of the shaft.

There is steady work repairing at Thurston's boat yard, and people are kept busy right along.

The new steamer W. H. Morley is expected to be ready for business at the end of this week.

At John Oades' yard the yacht Mona has been recalked and generally overhauled and painted; schooner Andrews new rails, timber heads and other repairs; the schooner Stewart for new fore and mizen masts, and the J. C. Whitney has had a new foremast made and is ready to be stepped; the steam yacht Lily will be docked for adjusting her new wheel, which was shipped here last week, and found to be rather too light. The wheel, which is a late invention, patented by a Californian, is something unique, being simply blades shipped on a hub and secured by a slot and screw bolts. On a recent trial trip she was said to have saved three minutes in a six-mile run. The large scow Ben Brink, built by this firm recently, has agreeably surprised both owners and builders by carrying 550,000 feet of green hemlock; this quantity is considered equivalent to 600.000 feet of pine, and is 100,000 more than she was expected to carry.

The Frontier Iron and Brass works have two engines in course of constuction for the Percheron steam navigation company measuring 20 by 32 and 54 by 42, also two others of the same dimensions for F. W. Wheeler of Bay City.

Samuel F. Hodge & Co. have completed their work on the steamer Cumberland with their usual dispatch, having finished the engines of this boat one week ahead of the specified time. The new engine was tried at the firm's dock and worked satisfactorily in every particular. A noticeable feature in Hodge's engines are, that in not one single case has it been found necessary to make a trial trip, and at the time of writing word has been received that the Cumberland is towing two schooners eight miles per hour on a consumption of 1500 pounds of coal per hour. The Vienna has had repairs to her pump connections. The firm have cleaned out the tug Wilson. A new crank shaft for the the river tug Champion is about completed.

The Eagle Iron works have finished a new cylinder for Captain R. Armstrong, of Bay City, measuring 12 by 23 bore and 18 inch stroke. They have also supplied two new 6 by 6 hoisting machines for T. B. Wheeler, of Bay City. Drawings have been completed and patterns will at once be made for a 7 by 10 deck hoisting engine.

Mr. Goss, the well known sailmaker, of this city, has just returned from California.

H. D. Edwards & Co., ship chandlers, are doing a steady business, but are not rushing.

Mr. H. H. Brown, of Cleveland, was in the city yesterday, presumably on business connected with the grounding of his steamer Fayette Brown.

The Wilson line steamer Spokane dropped her wheel off in Saginaw Bay on Monday. She was picked up by Grummond's tug Moore, and was towed into Sand Beach. It is reported that she is to go into dock here for new wheel.

There is more or less talk about tunneling the river, and some about bridging, said a Michigan Central officer: "We are constantly receiving proposals of some kind regarding the crossing, although I don't believe there is any special project just now under consideration. We need a tunnel, it is true, but only for the name of it. As a matter of fact, our present mode of crossing is cheaper and more expeditious than it would be with a tunnel. That is, of course, in summer. We have more or less trouble with ice in winter, but we are having a new iron steamer constructed at Cleveland which will simplify matters a good deal in the ice season. The new steamer works with both screw and paddle, and is so constructed that she will be better able to clear the slips than are the steamers now in use. That the ice can be overcome is easily shown by the success of the St. Ignace, and it is expected that the new steamer now being built will be as satisfactory here as the St. Ignace is at the straits."

The steel steamer Scranton is the latest vessel to meet with a mishap in the shallow water about Grosse Point. The Scranton is one of the finest boats on the lakes, and is the latest addition to the fleet of the Lackawanna transportatation company. She was built at Cleveland and was launched only about a month ago. When near Peche island the boat scraped along the rocky bottom and the movements of the vessel soon afterward showed that holes had been stove in her. After an investigation it was discovered that there was no danger of her sinking owing to the water-tight compartments. The water filled the forward compartment but luckily did not reach the cargo, which consisted of 78 000 bushels of grain. The captain proceeded on to Detroit, and reaching here in safety tied up at Livingstone's dock. The cargo will have to be unloaded and the water pumped out and then the boat will have to go into drydock for repairs. SWAIN-

TREASURY DECISION RELATIVE TO VESSELS.

STEAM VESSEL IMPORTED FROM CANADA LIABLE TO DUTY.

TREASURY DEPARTMENT, August 8, 1888.

Sir: The department is in receipt of your letter of the 27th ultimo reporting on the appeal 6688 of Mr. M. H. Folger from your decision assessing duty on a Canadian steam vessel, called Geneva, imported in your port from Canada in June last, the appellant alleging that under the terms of the special act of March 2, 1879, which authorizes the secretary of the treasury to grant an American registry to said vessel, no duties accrued thereon.

The appellant also protests, if the claim is not wholly allowed, against the exaction of duty on machinery contained in the said vessel, which he claims to be of domestic manufacture, heretofore exported from the United States.

The act above mentioned (20 Stats., p. 473) prescribes that an American registry may be issued to the said vessel upon the payment into the treasury of the United States of the duties legally chargeable upon said vessel.

Shortly after the passage of this act, viz., on the 13th of March, 1879, this department addressed a communication to the then collector of customs at your port, in which he was notified of the provisions of the said act, and was instructed, upon the payment into the United State treasury of the duties chargeable, to grant an American registry to the vessel. It appears, however, that the owners of the vessel failed to avail themselves of the privilege conferred by the act until June last, having, it is understood, in the mean time used the vessel under her foreign papers as a ferry-boat, but that at the period mentioned they made a regular importation of her and requested the issuance of a registry in accordance with the terms of the act, which request was subsequently granted by you upon the payment of the duties now complained of. The vessel, being an importation into the United States, is, under the existing tariff act and the special provision of the act above mentioned, as well as the rulings of the department in somewhat similar cases, liable to duty, and your decision is hereby affirmed.

In regard to the machinery, it may be stated that, inasmuch as it was exported as iron machinery, and is now imported as a part of the vessel, it has thereby lost its identity as a separate commodity, and the claim for its free entry cannot be allowed, the existing statute only exempting domestic manufactures from the payment of duty when they are returned in the same condition as exported.

To Collectors of Customs, Cape Vincent, N. Y.

TONNAGE TAX ON VESSELS FROM CANADA.

TREAS. DEP'T, BUREAU OF NAVIGATION,
WASHINGTON, D. C, August 15, 1888.

Sir: This office is in receipt of your letter of the 10th instant, transmitting protest and appeal (4929) of W. W. Green from your decision assessing tonnage dues on the British propeller Lake Michigan on a date subsequent to the 9th instant, but not specified precisely in your communication.

It does not appear from your report that the vessel was bound to Toledo at the time of her clearance from Montreal to Hamilton, Ontario, and it is stated in the protest that she cleared from Montreal to Hamilton with a cargo and from Hamilton to Toledo without cargo.

The fact that it is often the practice of vessels trading between your port and Montreal to clear from the latter place to same point in Ontario and thence to your port does not govern the decision in this particular case, and unless there is some good reason for supposing that the voyage to your port commenced at Montreal, you may forward a certified statement for a refund of the duty levied. Respectfully yours,

C. B. MORTON, Commissioner.

To Collectors of Customs, Toledo, Ohio.

CIRCULAR.—FRENCH VESSELS TO BE ADMITTED WITHOUT ADMEASUREMENT.

TREAS. DEP'T, BUREAU OF NAVIGATION,
WASHINGTON, D. C. August 24, 1888.

To collectors of customs and others:

It appearing to this department that the rules concerning the admeasurement for tonnage of vessels of the United States have been substantially adopted by the government of France, it is hereby directed that French vessels arriving in the United States shall hereafter be deemed to be of the tonnage denoted in their certificate of registry or other national papers, and that it shall not be necessary for such vessels when furnished with such certificates to be readmeasured in any port in the United States.

In such cases there must be added to the tonnage the amount of any deductions and omissions not authorized by the admeasurement laws of the United States. (Art. 139, Reg's, 1884.

The government of France has agreed substantially to accept in French ports the admeasurement of vessels of the United States certified in their registers, and to compute according to the tonnage given in said papers the navigation dues payable by such vessels. Any departure from this agreement at any port of France should be brought to the attention of the Bureau.

T. B. SANDERS, Acting Commissioner,
Approved.

C. S. FAIRCHILD, Secretary.

THE ST. CLAIR FLATS CANAL.

Just at this time a great deal is being said and printed about the locality of the St. Clair Flats ship canal, in the State of Michigan, and questions are being asked as to whether the canal is wholly or part in Canadian waters. The president questioned Colonel R. C. Parsons very carefully upon the subject today when he called at the White House, and examined the engineer's charts with critical interest. The whole matter is easily disposed of. The entire canal lies in American waters, save a small triangular part of it at the northeast corner, about seven hundred feet long and perhaps at the widest part of the strip twenty feet in breadth. In completing the canal under the proposed measure nothing is easier than to throw the entire upper part of the canal into American water, which will be done.

By the treaty of Ghent the commissioners who met at Utica in 1822 to settle the boundary line between Canada and the United States drew a line on the map, which if followed, would place the canal wholly in Canadian waters. But the phraseology of the commissioners defines the drawings so as to make unmistakable the line to be followed, this line placing the canal wholly in American waters save the 700 feet alluded to. In 1871, when the treaty was concluded between Great Britain and the United States, a map of Lake St. Clair was carefully prepared for the use of the commissioners, and the location of the canal was clearly defined and marked out upon the chart by the United States engineers. This placed the canal as above stated.

Then, by article 27 of that treaty, it was mutually agreed by the contracting parties that the people of the United States were to use the Welland canal upon the same terms as Canadian citizens and the people of Canada were to have the use of the St. Clair flats and Sault Ste. Marie canals; upon the same terms as the citizens of the United States. There was no question raised as to the locality of the canal, it being assumed from the examination of the charts and the boundaries that the canal was substantially in American waters. A resolution was passed some time ago by the senate asking for information on the subject of the war department, and General Casey, the chief engineer, is now preparing his reply.

The bill for completing the canal and making an appropriation for the money has received the indorsement of the river and harbor committee and will be reported next week to the house. It has received the cordial approval of the president, the secretary of war, and the engineers department, and it will probably pass the house. If it becomes a law it will secure the completion of the canal a year or two in advance, and thus give to the commerce of the lakes a channel suitable for its growing demands.

ABOUT CHICAGO'S RIVER.

I am glad to see Commissioner Swift awakening to the fact that commerce is being driven away from this port, said a marine representative, and I am equally well pleased at the commissioner's position, that we should foster this factor in our commercial greatness; do all we can to keep it within our control. To do this successfully he holds that we should deepen the river to accommodate the steamers, and not heighten the loads to accommodate the depth of the river. With so many open ports to enter no sane man is going to send his vessel here for half a load when he can fill her up elsewhere.

The city has made an appropriation of $40,000 for dredging the river. This is, of course, totally inadequate to accomplish what is needed. And yet, if this sum is judiciously used, the many bars in the bridges of the South Branch can be removed.

If left in the hands of the contractors, the money will soon disappear in work alongside the railroad docks and elevator slips. The dredging here, if it devolves upon the city, should be deferred until the main courses of navigation are cleared.

PROPOSALS FOR REPAIRS &c. U. S. Engineer office, 89 Euclid avenue, Cleveland, Ohio, September 20, 1888. Separate sealed proposals, in duplicate, will be received at this office, until 12 o'clock m. Monday, October 8, 1888, at which time they will be opened in presence of bidders, for repairs at the following harbors: At Monroe, Michigan; at Huron, Ohio; at Port Clinton, Ohio. Proposals will be accompanied by a written guarantee that in case the bid be accepted, contract will be entered into with good and sufficient security within ten (10) days after notice of such acceptance. Forms, specifications and other information can be obtained at this office. The United States reserves the right to reject any or all proposals. L. COOPER OVERMAN, Major of Engineers.

First-class Merchant Tailoring

Done in the nobbiest style, according to monthly new fashion plates; made by none but first-class mechanics and none delivered unless to the entire taste of the Customer, can be procured by *Jos. L. Kohn*, practical tailor and cutter at the tailoring department of *Kohn & Co.*, 213 Detroit street, second door from corner Pearl known as Boston Dry Goods Store, Cleveland, O.

In the rear of the above Store a fine stock of the latest patterns of *Cassimeres*, Cloths, *Over Coatings, Silk Vestings*, can be found and owing to the fact, that this young genius of a garment cutter Mr. Jos. L. Kohn does his own cutting, (which alone saves $30 per week) and has the appartment in the above Store free of any expense it enables him to Save the Customers from $6 to $10 on every Suit of Clothes. Convince yourself by calling at 213 Detroit street, second door from corner Pearl known as Boston Dry Goods Store of KOHN & CO., Cleveland, O.

WILLIAMSON BROS.

COR. RICHMOND AND YORK STS.,
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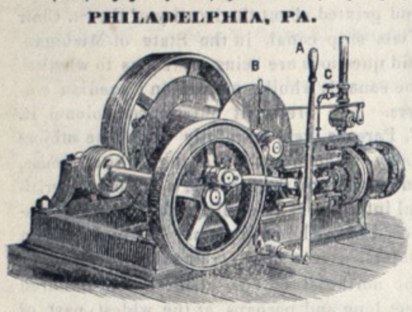

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STM'R ATLANTIC,
Captain J. R. Jones.
LEAVES CLEVELAND EVERY FRIDAY AT 8 P. M., CITY TIME.
For Mackinaw, St. Ignace, Cheboygan, Alpena, Oscoda, and way ports. For passage or freight apply to ANDERSON & CO., Agents, Dock ft. of Superior-st.
S. B. GRUMMOND, Owner.

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STEAMBOAT & ENGINEERS' SUPPLIES
Copper, Brass and Sheet Iron Manufactory.
IRON PIPE AND FITTINGS.
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Sail Maker and Rigger,
20 and 22 Woodward Av.,
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LARGE STORAGE ACCOMMODATION FOR VESSEL OUTFITS.

Scott's New Coast Pilot

Second Edition, Revised and Enlarged,
With new Maps and Illustrations corrected to the opening of Navigation in 1888,
IS SOLD BY
SHIP CHANDLERS
AND BY THE PUBLISHER.
GEORGE SCOTT,
AT 162 LARNED ST., E. DETROIT, MICH.

M. M. GLEKLER,

MANUFACTURER & DEALER IN
Cigars
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Tobacco.
156 River-st., Cleveland, Ohio.
No one should leave port without a box of M. M. Glekler's marinecigars.

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THE HANDSOME NEW FORE AND AFT SCHOONer W. C. Kimball, built at Manitowoc last winter, outfit all new and complete, 65 feet over all, 17 feet 4 inches beam, 4 feet 9 inches hold. Tonnage 31, 40 Apply to A. D JOHNSTON, Manitowoc, Wis.

YACHT FOR SALE.

SLOOP YACHT NORDEN, 45 feet water line, 13½ feet beam, in first-class sailing condition, for want of time to run, is offered for sale at a bargain. Address F. W. FINCHER, Pentwater, Mich.

HARBOR TUG FOR SALE.

THE TUG MYRTLE, of Sandusky, Ohio, for sale cheap. Is in first-class condition. For particulars write to FRED GROCH, Sandusky, O.

FOR SALE.

BARGE COL. BRACKET—She carries 260M feet of lumber, 420 tons of coal. Had $900 worth of repairs last season. Fit out good. Price $1,600. Mention this paper. ED. J. KENDALL, Port Huron.

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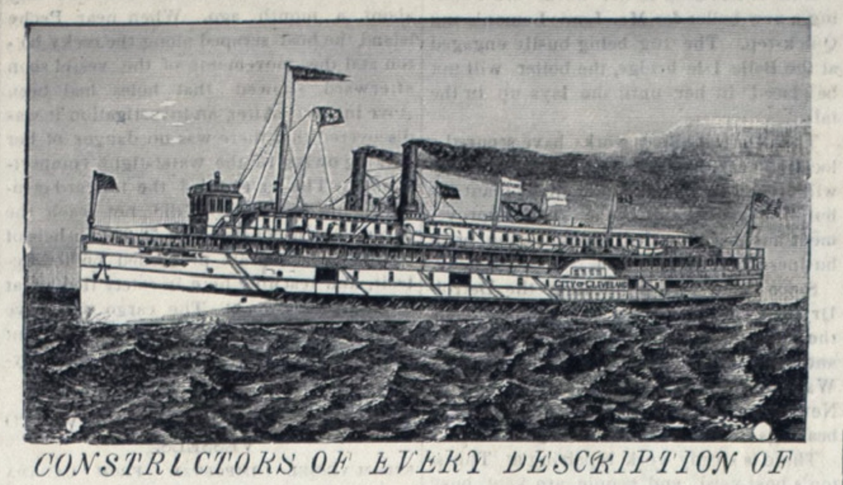
A steambarge 125 thousand capacity; will carry 120 passengers, only one year old; a good twelve mile boat in the best, possible condition; will be sold reasonable and on easy terms. For further particulars inquire of MARINE RECORD, Cleveland Ohio.

DETROIT DRY DOCK CO.,



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Steel, Iron, Composite and Wooden Ships.
IRON SHIP BUILDING WORKS AT WYANDOTTE, MICH
Dry Docks and Repair Yard, ft. of Orleans-st., Detroit, Mich.

S. B. GRUMMOND,

OWNER OF FIRST-CLASS
Tugs for Wrecking, Raft Towing, Etc.
STEAM PUMPS, ROTARY AND WORTHINGTON.
Improved Horizontal Straight Base Hydraulic Jacks.
Sub-marine Divers, Hawsers, Lighters, Etc.
WAREHOUSE AND OFFICE ON DOCK, FOOT OF FIRST ST.,
OWNER OF TUGS 'Winslow,' 'Leviathan,' 'M. Swain,' 'Champion,' 'Wm. A. Moore,' and 'Oswego.' } Detroit, Mich.
Also, Steam Barge MARY PRINGLE, with Steam Hoister and Wreaking Outfit on Board.
OFFICE OPEN DAY AND NIGHT. SATISFACTION GUARANTEED.
BRANCH OFFICES at PORT HURON & CHEBOYGAN, MICH
WRECKING TUG
LEVIATHAN, CAPT. M. SWAIN, STATIONED AT CHEBOYGAN
With plenty of Wrecking Material on board and in Warehouse.

A PUZZLE.

Which Man is the Tallest?

If you measure carefully the figures in this cut you will find that the man who appears the shortest is in reality the tallest. If you will coal your boats at my dock, adjoining S. F. Hodge Iron Works, you will get better dispatch and better COAL than at any other place in the city.

O. W. SHIPMAN,

OFFICE:
Corner Griswold and Larned Sts

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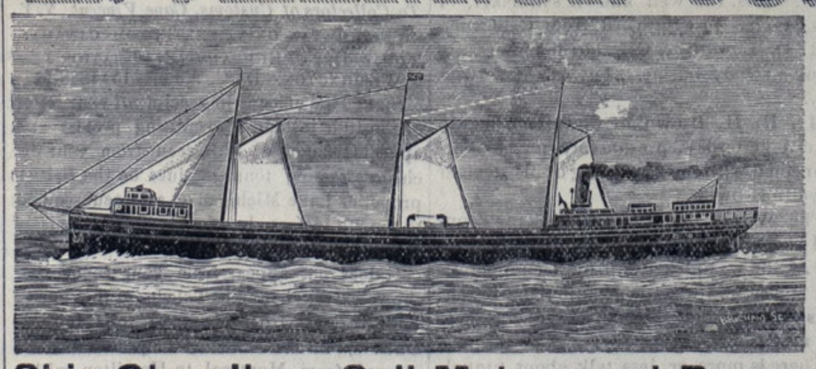

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For Steamers and Sailing Vessels.
PATENT FLUTED LENS AND PERFECT COLORS.

GET THE BEST AND AVOID COLLISIONS
These Lamps give a more brillant light than any Signal Lamp now in use.
They have been adopted by the principal Ocean and Lake Steamers
Over Ten Thousand Now in Use.
WE ALSO MANUFACTURE THE CELEBRATED
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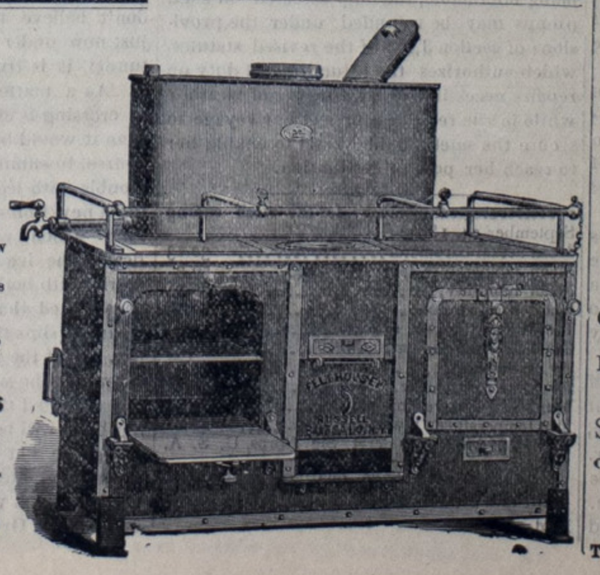

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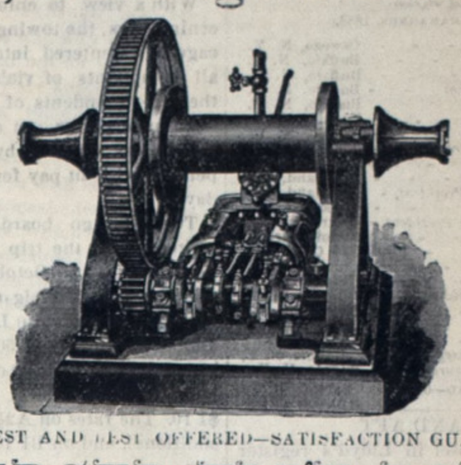
Specially adapted for Boat uses, Raising Sail, Hoisting Anchor, Pulling in Tow Line etc., etc.



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Engines, Boilers and Pumps on Hand for Prompt Shipment
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SIMPSON'S PATENT IMPROVED TIMBER DRY DOCK,
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MANITOWOC DRY DOCK.
Dry Dock will admit Vessels of 1100 tons drawing 12 feet. Have also a set of Boxes in connection with the Ship yard capable of lifting Vessels of 350 tons. A large stock of SPARS CONSTANTLY ON HAND.
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SPECIAL GRADES OF WATER AND STEAM HOSE FOR MARINE USE.
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Yawl Boats in stock 14, 16, 18, 20 and 22 feet long.
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Shops ft. of ORLEANS ST., DETROIT MICH.

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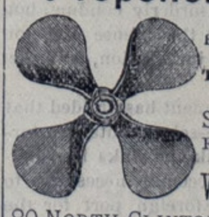

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Two, Three or Four Blades for SPEED OR TOWING
From 12 Inches to 14 feet in Diameter
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Where all kinds of *Flannel* and *Cotton Shirts*, from the cheapest 50c to the finest Custom made fancy shirt ☞*are made to order*☜ and none but our ☞own home made☜ bearing our Trade Mark, can be found constantly in stock ready made, is the Boston Dry Goods Store of Kohn & Co., 213 Detroit street, second door from corner Pearl, Cleveland, O. All our Shirts 54 inch wide, 40 inch long and extra well sewed. We also announce, that we are the only manufacturer, who can procure the genuine U. S. Navy flannel, of which we make *double* and *single breasted Sailor Shirts* ☜non-shrinkable, fancy pleated *Cloth Shirts* made in the latest styles, Canadian *Flannel Shirts*, *water proof Shirts* and more especially Scarlet Medicated *Flannel Under Shirts* and *Drawers*. ☞Call also for our Custom made *Jean Pants, Overalls, Jumpers*, etc., or leave your measure for the same.

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Special Attention Given to Vessel Supplies.

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Established in 1871. Telephone 210.

Signs, Steering Balls, Liberty Caps, Ornamental Work a Specialty in Cabins.

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Copper-smithing of all Kinds.

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River Machine Co.,

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Are prepared to Manufacture and do General Repairing on Marine Engines and all other Machine Work.

We have also a full line of pulleys and shafting and are prepared to do all kinds of Stone quarry Work.

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All Kind of Forgings, Bolts and Truss Rods for Building.

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BEESON'S SAILOR'S HAND BOOK,

And Synopsis of Marine Laws. Every vessel man wants one. For sale by marine clerk at all custom houses. Price 50c. See it.

Lake Shore & Michigan Southern.

Commencing Monday July 15, 1888. The time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive.	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No. 6 N. Y. & Boston Ex	*1 35 A M	*1 40 A M
No 8, N. Y. B & A Express	*8 25 A M	*8 50 A M
No 26, Elyria Accommodation	†7 45 A M	.....
No 10, Toledo Ac'm via Sandusky	†11 05 A M	.....
No 10, Toledo Accom via Norwark	†11 05 A M	.....
No. 24, Buffalo Accommodation	.....	† 7 00 A M
No. 10, New York & Boston, "Flyer"	.....	*11 50 A M
No 12, N Y & B Fast Express	*2 35 P M	3* 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	
No 3, Chicago Express via "	5 30 A M	5 45 A M
No 25, Mich Accom Norwalk	.....	†5 45 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	*6 55 P M	*7 15 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 9:20 a. m. and 1:00 p. m.; returning, arrive at 9:20 a. m. and 4:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 50 A M.; arrive Grand Central depot, New York, 7.30 a. m.

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

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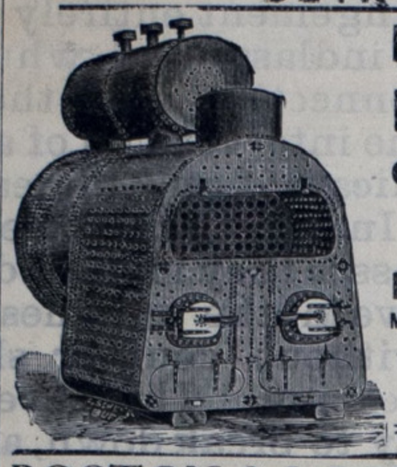

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Marine, Stationary, Portable, Locomotive and Upright Boilers; also, Salt Pans, Smoke Pipes and Heavy and Light Plate Iron Work of all Descriptions.

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We make the most durable grade of Blocks to be obtained in the market Call for our SELF ADJUSTABLE FIVE ROLL ROLLER BUSHED STAR BRAND BLOCKS AND DO AWAY WITH REPAIRS.

Money Saved, Money Gained, Money Well Spent

BY BUYING GOODS DIRECT FROM MANUFACTURERS AT JOBBING PRICES.

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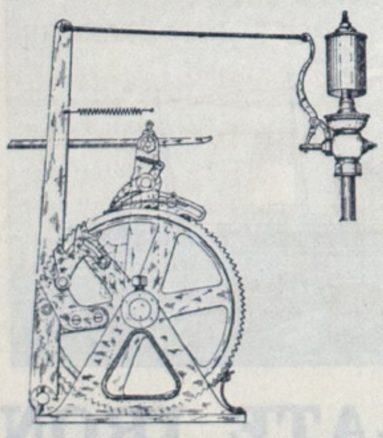
OFFICE 130 RIVER-ST., CLEVELAND, OHIO.



The manufacturers are the Chase Fog Whistle Machine Co., corner of Elm and Spruce streets, Cleveland, O.

Chase Fog Whistle Machine

This machine has been placed on the following steamboats during the past year: SPOKANE, WALLULA, KASOTA, CHARLEMAGNE TOWER, JR, YAKIMA, MISSOULA, SITKA, FAYETTE BROWN, R. J. HACKETT, FOREST CITY, SPARTA, HAVANA, VIENNA, OSCAR TOWNSEND, CITY OF CLEVELAND, HENRY CHISHOLM, SUPERIOR, E. B. HALE, M. B. GROVER, J. S FAY, R. P. HANNEY, SMITH MOORE, CHARLES J SHEFFIELD, IRA H. OWEN, CAMBRIA, CORSICA, J. H. OUTHWAITE, SAMUEL MATHER, R. R. RHODES, COLUMBIA, AURORA, OHIO, WM. EDWARDS, S. E. SHELDON, AUSTRALASIA, RALEIGH, BULGARIA, ROUMANIA, J. F. EDDY, HIAWATHA, THOS. ADAMS, A. P. WRIGHT, GLADSTONE, E. P. WILBUR, SOO CITY, E, M. PECK, ROBERT L. FREYER AND NORTHERN LIGHT.

To the President and Board of Supervising Inspectors of Steam Vessels:

Your committee to which was referred the 'Chase Fog Whistle Machine" beg leave to report: "That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and would recommend it or similar device to owners of steam vessels as an additional safeguard to navigation.

H. S. LUBBOCK,
GEO. H. STARBUCK,
W. D. ROBINSON,
} Committee.

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THE CYCLONE STEAM FLUE CLEANER,
THE CRESCENT STEEL TUBE SCRAPER,
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THE CRESCENT COMPRESSION GREASE CUP,
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Chains for Foundry Cranes and Slings.

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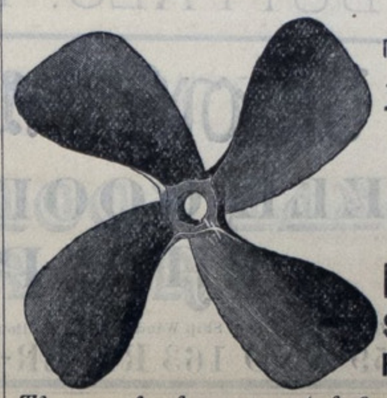
Steel and Iron Dredging, Slope and Mining Chains.

H. G. TROUT,

KING IRON WORKS,

BUFFALO, N. Y.,

MANUFACTURER OF



Triple Expansion Marine Engines, Three Cylinder and Fore and Aft and Steeple Compound Marine Engines, High and Low Pressure Engines

SECTIONAL PROPELLER WHEELS, PROPELLER, TUG & YACHT WHEELS

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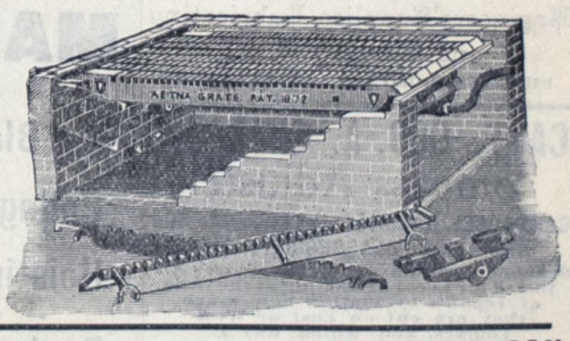

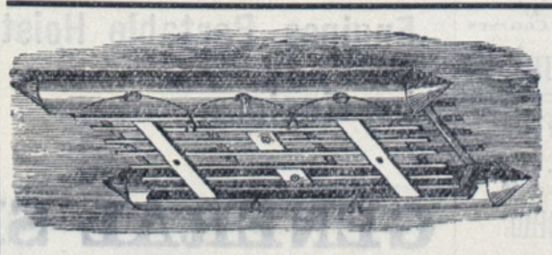

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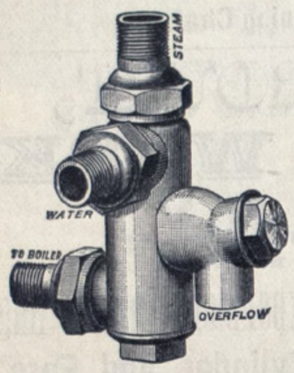

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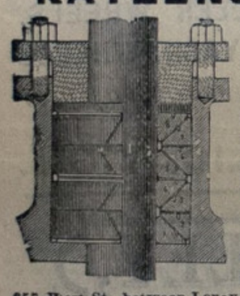

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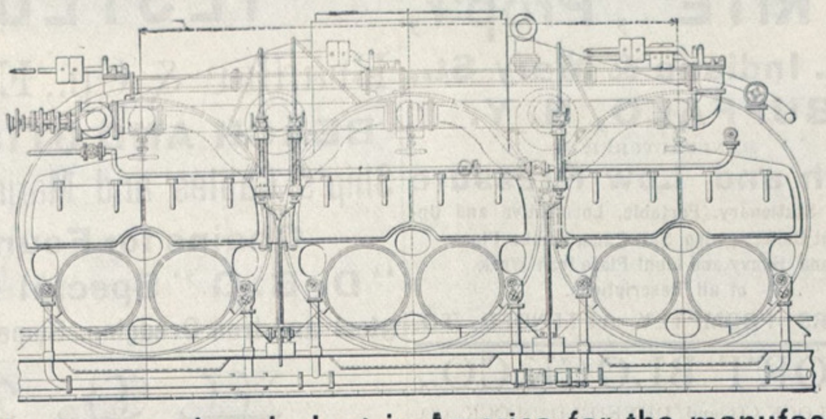

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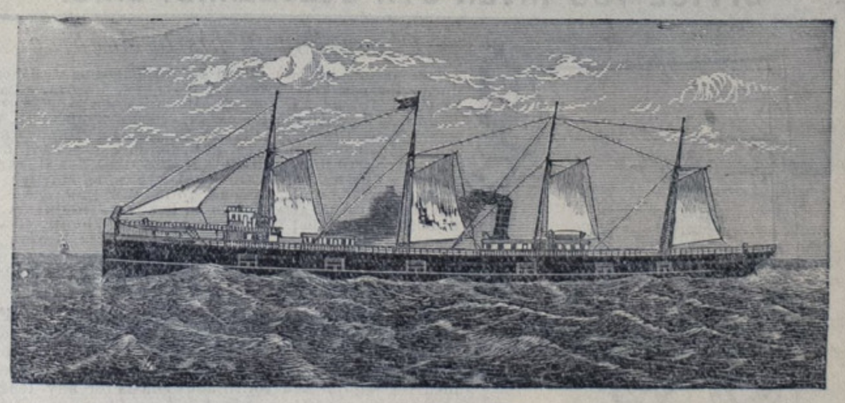

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